ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND, AND WATER

www.dnr.alaska.gov/mlw/water/index.cfm

WATER RESOURCES SECTION



For ADNR Use Only Date Stamp

Anchorage Office 550 West 7th Avenue, Suite 1020

For ADNR Use Only

TWUA#

Anchorage, AK 99501-3562 (907) 269-8400 Fax: (907) 465-3886 Fax: (907) 269-8904

Juneau Office 400 Willoughby, #400 PO Box 111020 Juneau, AK 99811-1020 (907) 465-3400

For ADNR Use Only

CID #(s)

3700 Airport Way Fairbanks, AK 99709-4699 (907) 451-2705 Fax: (907) 451-2703

> Receipt Code "WR"

Fairbanks Office

APPLICATION FOR TEMPORARY USE OF WATER

Applicants must complete all sections of this application.

Incomplete applications will not be accepted

- Up to five (5) separate sources of water may be requested on a single application. If more than five (5) separate water sources are needed, additional applications will be required.
 - Types of sources include: river, stream, creek, spring, lake, pond, well, etc.
- Normal processing time is approximately 60 days based upon the date DNR determines the application is complete, and anticipated project start date.
- If Needed: CALL FOR INSTRUCTIONS or answers to questions before submitting application:
 - For mining water uses, excluding gravel, contact the Fairbanks office at (907) 451-2790
 - For hydroelectric and all other Southeast projects, contact the Juneau office at (907) 465-2533.
 - For all other temporary uses of water, contact the Anchorage office at (907) 269-8641.
- Unless otherwise requested, the issued authorizations are emailed to the Applicant.

SECTION I: APPLICANT INFORMATIO	N
Duning at Marina	
Applicant Name (Individual or Company): _	
Name and Title of Company Contact:	
Mailing Address:	
Phone Number:	Alternate Phone Number:
Email Address:	
Agent/Consultant Name and Title:	
Organization Name:	
Mailing Address:	
	Alternate Phone Number:
Email Address:	

SECTION II: FEES

Application Fee \$450: (the application fee covers up to 18 hours of staff time)

Submit non-refundable fee of \$450 for each application per 11 AAC 05.260.

Make checks payable to the "Department of Natural Resources."

** For Credit Card payments, wait for confirmation email with assigned case number and payment instructions.

SECT	ION	III-	MAP	(e)
3 ⊑ ∪।	IUI	111.	IVIAC	3

Period of Use:

Attach a legible map(s), such as a USGS topographic map or subdivision plat, that includes labeled meridian, township, range, and 1. section lines (MTRS). The map(s) must be of sufficient scale to show the location of the proposed activity. Indicate clearly on the map the following: (check each box when completed) the location where water is to be withdrawn from each water source. the area(s) where the water is proposed to be used. If applicable: the area(s) where water is to be discharged. the area(s) where water is to be returned to the water source. SECTION IV: PERIOD OF USE Total number of years water use is being requested: (maximum five years) _____ Water Use End Date: ____ Water Use Start Date:

☐ Seasonal Months & Days of use (e.g. June 1st - September 30th): _____

SECTION V: LOCATION DESCRIPTION

☐ Year-round

Identify each water source and its geographic location using MTRS. Include Lat/Long coordinates if available.

Example: Finger Lake: Seward Meridian, Township 22 North, Range 15 West, Section 20, SW¼NW¼

> MTRS: S 22N 15W 20 SW NW Lat/Long: 61°59'1.892"N, 152°04'22.037"W

Table 1: Name & Location of Water Sour	ce(s) (No	more than 5 v	water separa	ate sources per	application)	
Geographic Name of Water Body or Well Depth (if unnamed, put "Unnamed"; e.g. unnamed lake.)	Meridian	Township	Range	Section(s)	Quarter Sec (optional QQ	
1.					1/4	1/4
	Latitude:			Longitude:		
2.					1/4	1/4
	Latitude:	•		Longitude:		·
3.					1/4	1/4
	Latitude:			Longitude:		•
4.					1/4	1/4
	Latitude:			Longitude:		•
5.					1/4	1/4
	Latitude:	•		Longitude:	1 1	1

Datum Used: Geographic Coordinate System for Lat/Long (e.g. NAD83):

Identify the project area(s) where water is to be used and the geographic locations using MTRS. Include Lat/Long coordinates if available. If linear, such as a road construction project, include a start and end Lat/Long and/or milepost.

Table 2: Location of Water Use Area(s)								
Project Area (e.g. milepost range, place name, survey, etc.)	Meridian	Township	Section(s)	Quarter Sections (optional) QQ (Q	
1.						1/4		1/4
	Start Latitude) :		Start Longitude:				
	End Latitude	:		End Longitude:				
2.						1/4		1/4
	Start Latitude) :		Start Longitude:				
	End Latitude			End Longitude:				
3.						1/4		1/4
	Start Latitude	.		Start Longitu	ıde:			
	End Latitude	:		End Longitude:				

Datum Used: Geographic Coordinate System for Lat/Long (e.g. NAD83):

(Attach additional sheets if needed)

Identify the location(s) where water is to be discharged or returned to the source and the geographic locations using MTRS. Include Lat/Long coordinates if available.

Table 3: Location of Water Discharge or Ret	urn Flow (if applicab	le)			
Describe the area where the water will be discharged or returned to the source (Example: ground surface, name of river, lake, well, etc.)	Meridian	Township	Range	Section(s)	Quarter S (option QC	al)
					1/4	1/4
	Latitude:			Longitude:	·	
					1/4	1/4
	Latitude:			Longitude:	·	
					1/4	1/4
	Latitude:			Longitude:		
					1/4	1/4
	Latitude:			Longitude:		

Datum Used: Geographic Coordinate System for Lat/Long (e.g. NAD83):

(Attach additional sheets if needed)

SECTION VI: AMOUNT OF WATER per source

The next five pages contain a data table for each specific water source being requested (Source 1, Source 2, Source 3, Source 4, and Source 5). Complete a data table for each source. If you are only requesting one (1) source, complete only the Source 1 data table.

No more than five (5) sources per application.

Glossary of terms are listed on the last page of this application.

Source 1	(as identified	d in Secti	on V, Tab	le 1)							
☐ Surface	Source Name (Example:	Chena Riv	/er):							
Source Dept	n (ft):	Source	Width (ft) (river, stream or c	reek only)	Surface Area	a (acres): (la	ke or pond.	only)	Source Volume (gallons):	
Data Source	· ,					ı					
(i.e. bathyme Are fish	_	Yes	□ No □	Unknown							
	hat fish type(s)	are they:	☐ Anadr	omous 🔲 F	esident	☐ Resistan	nt 🗌 Sens	itive 🔲	Unknov	wn	
☐ Subsurfa	ace Source Nar	ne <i>(Exam</i>	ple: Well A	11):							
Well Depth		(=====	Well Diam			Static Water	Level (ft):		Rec	covery Rate (g/m):	
	. ,	ed site wit		. ,		_	. ,	Jnknown		(3)	
Quantity of Water to be used or taken from this source only:											
Lotal amount Lotal Seasonal Lotal Seasonal Lotal amount Lotal amount Lotal Seasonal Lotal Season										Date Water Use Will End (mm/dd/yyyy)	
		1			<u>L.,</u>				.,		
Purpose: Describe how the water is to be used and for what purpose. If multiple uses describe each use. Specify season of use if applicable.											
Method of Taking: (Check and complete all that apply) ☐ Withdrawal ☐ Diversion ☐ Impoundment ☐ In Source Water Use											
☐ Withdrav	val: If there a	e conside	rable variat	ions in the pun	p/siphor	capacities and	d operation s	chedule, d	escribe	difference in an attachment.	
☐ Pumps	Numbe Pump(s)/Si	-	Pump/Sip Intake S (inches	ize Pump	ax. Siphon (gpm)	Max. F	honing per	# of Da	onth	Length of pipe/hose (pump/siphon to point of use)	
☐ Siphon			(IIICITES	s) Rate	(урііі)	Day ((nrs)	(days)	(ft)	
Haul Trucks:	Number of	Trucks:		Tank C	apacity (gal):		# of Load	s/day:		
Storage Tanks:	Number of ⁻	Tanks:		Tank C	apacity (gal):		# of Fill/d	ay:		
☐ Diversio	n: Is this	diversion	a stream b	ypass? 🔲 Y	es [] No					
Does the div	ersion have a he	adgate st	ructure?	☐ Yes	☐ No	If Yes, how	w many hours	s/day will th	e head	gate be open: hrs	
		Pipe/F	ose Diame			ength (ft) o pint of use)	S	creened		Diversion Rate	
P	ump:		(in)	(IIOIII tar	е роти и	o pint or use)	☐ Ye	es 🗆 N	lo	(gpm or cfs)	
		Lengt				Lined		Head Ele		Diversion Rate	
Gravit	y / Ditch:	(ft)	(ft)	(ft)		☐ Yes ☐] No	(ft)	1	(gpm or cfs)	
☐ Impound	Iment: Attacl	drawing	s, specific	ations and pla	ns						
		T	isting Dam			constructed					
	am:		am Height		m Width	at Base	Dam V	/idth at Cre	est	Water Storage Capacity	
			(ft)		(ft)			(ft)		(gallons or acre-feet)	
		Lengt (ft)	h Widt	h Depth		Reservoir Sto		ty	Со	I fferdam Dewatering Amount (gallons or acre-feet)	
Reservoirs	Reservoirs / Cofferdam: (ft) (ft) (gallons or acre-feet) (gallons or acre-feet)										
		Lengt				Is this a Perm	nanent Levee	?		Diversion Rate	
L	evee	(ft)	(ft)	(ft)		☐ Yes	□ No			(gpm or cfs)	
☐ In Source	☐ In Source Water Use: Water used does not leave water source Attach drawings, specifications and plans										
			netic Devic			electric Turbine	-	Suction Dre			

Source 2	(as identified	l in Secti	on V, Tab	le 1)								
☐ Surface	Source Name (Example:	Chena Riv	ver):								
Source Dept	n (ft):	Source '	Width (ft) (river, stream c	r creek (only)	Surface Area	a (acres): (lai	ke or pond.	only)	Source Volume (gallons):	
Data Source	· ,											
(i.e. bathyme Are fish		Yes [□ No □	Unknown								
	hat fish type(s)				Resid	dent	☐ Resistan	t 🗌 Sens	itive \square	Unknov	wn	
☐ Subsurfa	ace Source Nar	ne (Fyam	nle: Well A	11).								
Well Depth		TO (Exam	Well Diam				Static Water	l evel (ft):		Rec	covery Rate (g/m):	
•	. ,	ed site wit			27			. ,	Inknown	IXCC	overy reace (g/m).	
Is there a known contaminated site within ¼ mile of this source?												
Quantity of Water to be used or taken from this source only:												
Amount of Water to be Used:	Total amount per Day (gallons)	An	Seasonal nount llons)	Seasona Amount o Ice (gallon	f	Total	Water & Ice ((gallons)	Combined	Date V Use Will (mm/dd	Begin	Date Water Use Will End (mm/dd/yyyy)	
Purpose: Describe how the water is to be used and for what purpose. If multiple uses describe each use. Specify season of use if applicable.												
Method of T	Method of Taking: (Check and complete all that apply) ☐ Withdrawal ☐ Diversion ☐ Impoundment ☐ In Source Water Use											
☐ Withdraw	val: If there ar	e conside	rable variat	tions in the p	ump/siį	iphon c	capacities and	d operation s	chedule, d	escribe	difference in an attachment.	
☐ Pumps	Numbe Pump(s)/Si	-	Pump/Sip Intake S (inches	ize Pur	Max. np/Siph te (gpn		Max. F	honing per	# of Da	onth	Length of pipe/hose (pump/siphon to point of use)	
☐ Siphon			(11101100	, , , , ,	.o (gp:	,	Day (nis)	(days)	(ft)	
Haul Trucks:	Number of	rucks:		Tan	к Сара	acity (g	al):		# of Load	ds/day:		
Storage Tanks:	Number of	anks:		Tan	к Сара	acity (g	al):		# of Fill/o	lay:		
☐ Diversio	n: Is this	diversion	a stream b	ypass?	Yes		No					
Does the div	ersion have a he	adgate st	ructure?	☐ Yes		No	If Yes, how	v many hours	s/day will th	ne head	gate be open: hrs	
		Pipe/H	ose Diame (in)				gth (ft) pint of use)	Sc	creened		Diversion Rate (gpm or cfs)	
P	ump:		(111)	(IIOIII	аке рс	oirit to	pint or use)	☐ Ye	s 🗆 N	No	(gpin or cis)	
		Lengt			h		Lined		Head Ele		Diversion Rate	
Gravit	y / Ditch:	(ft)	(ft)	(ft)			☐ Yes □] No	(ft)	(gpm or cfs)	
☐ Impound	Iment: Attach	drawing	s, specific	ations and p	olans							
		□ E>	isting Dam		Dam to	o be co	onstructed					
	am:	Da	m Height	[Dam W		Base	Dam W	/idth at Cr	est	Water Storage Capacity	
	(ft) (ft) (gallons or acre-feet)											
Reservoirs	/ Cofferdam:	Lengt (ft)	h Widt	h Dept	h		Reservoir Sto (gallons o	rage Capacit r acre-feet)	ty	Со	I fferdam Dewatering Amount (gallons or acre-feet)	
TCGCI VOITS												
		Lengt (ft)	h Widt (ft)		nt		ls this a Perm	nanent Levee	?		Diversion Rate (gpm or cfs)	
	Levee (ii) (ii) Yes No											
☐ In Source	☐ In Source Water Use: Water used does not leave water source Attach drawings, specifications and plans											
		Hydroki	netic Devic	e [] Ну	ydroele	ectric Turbine		Suction Dre	edge		

Source 3	(as identified	l in Secti	on V, Tab	le 1)								
☐ Surface	Source Name (Example:	Chena Riv	/er):								
Source Dept	n (ft):	Source	Width (ft) (river, stream or c	reek only)	Surface Area	a (acres): (la	ke or pond.	only)	Source Volume (gallons):		
Data Source	· ,					1						
(i.e. bathyme Are fish		Yes [□ No □	Unknown								
	hat fish type(s)	are they:	☐ Anadr	omous 🔲 R	esident	☐ Resistan	nt 🗌 Sens	itive 🔲	Unknov	wn		
☐ Subsurfa	ace Source Nar	ne (Exam	ple: Well A	11):								
Well Depth			Well Diam			Static Water	l evel (ft)		Rec	covery Rate (g/m):		
	. ,	ed site wit			П		. ,	Jnknown	1,00	yevery reace (g/m/).		
Is there a known contaminated site within ¼ mile of this source?												
Quantity of Water to be used or taken from this source only:												
Lotal amount Lotal Seasonal										Date Water Use Will End (mm/dd/yyyy)		
					1							
Purpose: Describe how the water is to be used and for what purpose. If multiple uses describe each use. Specify season of use if applicable.												
Method of T	Method of Taking: (Check and complete all that apply) ☐ Withdrawal ☐ Diversion ☐ Impoundment ☐ In Source Water Use											
☐ Withdraw	val: If there ar	e conside	rable variat	ions in the pum	p/siphor	n capacities and	d operation s	chedule, d	escribe	difference in an attachment.		
☐ Pumps	Numbe Pump(s)/Si	-	Pump/Sip Intake S (inches	ize Pump/	ax. Siphon (gpm)	Max. H	honing per	# of Da	onth	Length of pipe/hose (pump/siphon to point of use)		
☐ Siphon			(, itale	(9)	Day ((1115)	(days	,	(ft)		
Haul Trucks:	Number of	rucks:		Tank C	apacity ((gal):		# of Load	ls/day:			
Storage Tanks:	Number of ⁻	anks:		Tank C	apacity ((gal):		# of Fill/d	ay:			
☐ Diversio	n: Is this	diversion	a stream b	ypass? 🛚 Y	es [] No						
Does the div	ersion have a he	adgate st	ructure?	☐ Yes	☐ No	If Yes, how	w many hours	s/day will th	ne head	gate be open: hrs		
		Pipe/H	ose Diame (in)			ength (ft) o pint of use)	S	creened		Diversion Rate (gpm or cfs)		
P	ump:		(111)	(IIOIII tar	е роти и	o pint or use)	☐ Ye	es 🗆 N	10	(gpin or cis)		
		Lengtl				Lined		Head Ele		Diversion Rate		
Gravit	y / Ditch:	(ft)	(ft)	(ft)		☐ Yes ☐] No	(ft)		(gpm or cfs)		
☐ Impound	Iment: Attach	drawing	s, specific	ations and pla	ns					I		
		□ E>	isting Dam	Da	ım to be	constructed						
	am:		am Height		n Width	at Base	Dam V	/idth at Cre	est	Water Storage Capacity		
			(ft)		(ft)			(ft)		(gallons or acre-feet)		
		Lengt (ft)	h Widt	h Depth (ft)		Reservoir Sto	l orage Capaci or acre-feet)	ty	Со	I fferdam Dewatering Amount (gallons or acre-feet)		
Reservoirs	/ Cofferdam:	(11)	(1.5)	(11)		(gallorio o	. 4010 1001)			(gallotte of dolo root)		
		Lengtl (ft)	h Widt	h Height (ft)		Is this a Perm	nanent Levee	?		Diversion Rate (gpm or cfs)		
L	evee	(11)	(11)	(11)	1	☐ Yes	□ No			(дрин от сто)		
☐ In Source	Water Use: 1	Vater use	d does not i	leave water sou	ırce A	Attach drawing		tions and	plans			
			netic Devic			electric Turbine	-	Suction Dre				

Source 4	(as identified	d in Sect	ion V, Tab	le 1)								
☐ Surface	☐ Surface Source Name (Example: Chena River):											
Source Deptl	n (ft):	Source	Width (ft) (river, stream or o	reek only)	Surface Are	ea (acres): (la	ke or pond. only)	Source Volume (gallons):			
Data Source						1						
Are fish		Yes	□ No □	Unknown								
If Yes, w	hat fish type(s)	are they:	☐ Anadr	omous 🔲 I	Resident	☐ Resistar	nt 🗌 Sens	itive 🗌 Unk	nown			
☐ Subsurfa	ace Source Nar	ne <i>(Exan</i>	ple: Well A	\1):								
Well Depth	(ft):		Well Diam	neter (in):		Static Wate	r Level (ft):	F	Recovery Rate (g/m):			
Is there a kno	Is there a known contaminated site within ¼ mile of this source?											
Quantity of	Quantity of Water to be used or taken from this source only:											
Amount of Water to be Used: Total amount per Day (gallons) Total Seasonal Amount of (gallons) Total Seasonal Amount of Ice (gallons) Total Seasonal Amount of Ice (gallons) Total Water & Ice Combined (gallons) Total Water & Ice Combined (gallons) Date Water Use Will Begin (mm/dd/yyyy)												
Purpose: Describe how the water is to be used and for what purpose. If multiple uses describe each use. Specify season of use if applicable.												
Method of T	Method of Taking: (Check and complete all that apply) ☐ Withdrawal ☐ Diversion ☐ Impoundment ☐ In Source Water Use											
☐ Withdraw	val: If there a	e conside	erable variat	ions in the pur	np/siphor	capacities an	nd operation s	chedule, descri	be difference in an attachment.			
☐ Pumps	Numbe Pump(s)/Si		Pump/Sip Intake S (inches	ize Pump	lax. /Siphon (gpm)	Pumping/Si	Hours phoning per (hrs)	# of Days Used/Month (days)	Length of pipe/hose (pump/siphon to point of use) (ft)			
☐ Siphon						23,	(5)	(uuyo)	(1.9)			
Haul Trucks:	Number of	Trucks:		Tank (Capacity	gal):		# of Loads/da	y:			
Storage Tanks:	Number of ⁻	Γanks:		Tank (Capacity	gal):		# of Fill/day:				
☐ Diversion	n: Is this	diversion	a stream b	ypass? 🔲 `	∕es [] No						
Does the dive	ersion have a he	adgate s	tructure?	☐ Yes	☐ No	If Yes, ho	w many hours	s/day will the he	adgate be open: hrs			
_		Pipe/F	lose Diame (in)			ength (ft) o pint of use)	S	creened	Diversion Rate (gpm or cfs)			
Pi	ump:		(111)	(IIOIII ta	to point t	o piin oi use)	☐ Ye	es 🗌 No	(дригогога)			
		Lengt (ft)	h Widt	h Depth		Lined	<u> </u>	Head Elevation (ft)	on Diversion Rate (gpm or cfs)			
Gravit	y / Ditch:	(11)	(11)	(II)		☐ Yes [□ No	(11)	(урт от ста)			
☐ Impound	lment: Attacl	drawing	s, specifica	ations and pla	ns			•				
		□ E:	xisting Dam	□ D	am to be	constructed						
D	am:	D	am Height (ft)	Da	m Width (ft)	at Base	Dam V	Vidth at Crest (ft)	Water Storage Capacity (gallons or acre-feet)			
			(11)		(11)			(it)	(gallons of acre-reet)			
Reservoirs	Reservoirs / Cofferdam: Length Width Depth Reservoir Storage Capacity Cofferdam Dewatering Amount (ft) (ft) (gallons or acre-feet) (gallons or acre-feet)											
		Lengt	h Widt	h Height					Diversion Rate			
Le	evee	(ft)	(ft)	(ft)			manent Levee	9?	(gpm or cfs)			
						☐ Yes	☐ No					
☐ In Source	Water Use:	Vater use	d does not i	leave water so	urce A	ttach drawin	gs, specifica	tions and plan	s			
		Hydrok	inetic Devic	е П	Hydroe	electric Turbine	е П 9	Suction Dredge				

Source 5	(as identified	l in Sect	on V, Tabl	le 1)								
☐ Surface	Source Name (Example	Chena Riv	ver):								
Source Deptl	n (ft):	Source	Width (ft) (1	river, stream or cr	eek only)	Surface Are	a (acres): (la	ke or pond. only)	Source Volume (gallons):			
Data Source						•						
Are fish		Yes	□ No □	Unknown								
If Yes, w	hat fish type(s)	are they:	☐ Anadr	omous \square R	esident	☐ Resistar	nt 🗌 Sens	itive 🗌 Unkr	nown			
☐ Subsurfa	ace Source Nar	ne <i>(Exam</i>	ple: Well A	1):								
Well Depth	(ft):		Well Diam	eter (in):		Static Water	Level (ft):	R	Recovery Rate (g/m):			
Is there a kno	Is there a known contaminated site within ¼ mile of this source?											
Quantity of	Quantity of Water to be used or taken from this source only:											
Amount of Water to be Used: Total amount per Day (gallons) Total Seasonal Amount of (gallons) Total Seasonal Amount of Ice (gallons) Total Seasonal Amount of Ice (gallons) Total Water & Ice Combined (gallons) Total Water & Ice Combined (gallons) Date Water Use Will Begin (mm/dd/yyyy)												
Purpose: Describe how the water is to be used and for what purpose. If multiple uses describe each use. Specify season of use if applicable.												
Method of T	Method of Taking: (Check and complete all that apply) ☐ Withdrawal ☐ Diversion ☐ Impoundment ☐ In Source Water Use											
☐ Withdraw	val: If there ar	e conside	rable variat	ions in the pum	p/siphon	capacities an	d operation s	chedule, descrik	pe difference in an attachment.			
☐ Pumps	Numbe Pump(s)/Si		Pump/Sip Intake S (inches	ize Pump/	Siphon	Max. I Pumping/Sip Day	phoning per	# of Days Used/Month (days)	Length of pipe/hose (pump/siphon to point of use) (ft)			
☐ Siphon				·		July 1	()	(days)	(1.)			
Haul Trucks:	Number of	rucks:		Tank C	apacity (gal):		# of Loads/day	ŗ.			
Storage Tanks:	Number of	anks:		Tank C	apacity (gal):		# of Fill/day:				
☐ Diversion	n: Is this	diversion	a stream b	ypass? 🛚 Y	es [] No						
Does the dive	ersion have a he	adgate st	ructure?	☐ Yes	☐ No	If Yes, how	w many hours	s/day will the he	adgate be open: hrs			
		Pipe/F	lose Diame			ngth (ft) o pint of use)	S	creened	Diversion Rate (gpm or cfs)			
Pi	ump:		(111)	(HOIII tak	c point t	pint or use)	☐ Ye	es 🗌 No	(gpin or cis)			
		Lengt (ft)	h Widt	h Depth (ft)		Lined		Head Elevatio	Diversion Rate (gpm or cfs)			
Gravit	y / Ditch:	(11)	(11)	(11)		☐ Yes ☐] No	(it)	(урт от ста)			
☐ Impound	lment: Attach	drawing	s, specifica	ations and plai	15			•				
		□ E:	disting Dam	☐ Da	m to be	constructed						
D	am:	Di	am Height (ft)	Dan	n Width (ft)	at Base	Dam V	/idth at Crest (ft)	Water Storage Capacity (gallons or acre-feet)			
			(11)		(11)			(10)	(ganorio di dore rect)			
Reservoirs	/ Cofferdam:	Lengt (ft)	h Widt (ft)	h Depth (ft)			orage Capaci or acre-feet)	ty	Cofferdam Dewatering Amount (gallons or acre-feet)			
		Lengt	h Widtl	h Height				_	Diversion Rate			
Le	evee	(ft)	(ft)	(ft)			manent Levee	9?	(gpm or cfs)			
						☐ Yes	☐ No					
☐ In Source	Water Use: V	Vater use	d does not l	eave water sou	rce A	ttach drawing	gs, specifica	tions and plans	S			
		Hydroki	netic Device	е П	Hydroe	lectric Turbine	. \square	Suction Dredae				

SI	ECTION VII: PROJECT DESCRIPTION
1.	Summarize your entire project. Attach a detailed project description.
2.	(Attach additional sheets if needed) What alternative water sources are available should a portion of your requested use be excluded because of water shortage or public interest concerns?
3	(Attach additional sheets if needed) Are there any surface water bodies or water wells at or near your site(s) that could be affected by the proposed
Ο.	activity? Yes No Unknown
	If yes, list them and any surface water or ground water monitoring programs going on at or near the sites, any water shortages or water quality problems in the area, and any information about the water table, if known.
	(Attach additional sheets if needed)
4.	Briefly describe what changes at the project site and surrounding area will occur or are likely to occur because of
	construction or operation of your project (e.g. public access, streambed alteration, trenching, grading, excavation, etc.)
	(Attach additional sheets if needed)
5.	Briefly describe land use around the water take, use and return flow points (e.g. national park, recreational site, residential).
6.	Will the project be worked in phases?

(Attach additional sheets if needed)

SECTI	ON VIII:	OTHER PERMITS THAT	MAY BE REQUIRED			
1.	Have yo	ou contacted ADF&G for an	y required Permits?		☐ Yes	☐ No
2.	Have yo	ou contacted ADEC for any	required Water Authoriza	tions?	☐ Yes	☐ No
3.	Have yo	ou contacted the U.S. Army	Corps of Engineers for a	ny required Permits?	☐ Yes	☐ No
4.	Have yo	ou received land access per	mission for all requested	water sources, uses, and	discharges?	☐ No
5.	"Hazard	ation includes an artificial b Potential Classification and Dam Safety Program?		orm to determine if it falls		
SECTI	ON IX:	SIGNATURE				
Check	all that a	are attached:				
		Application Fee: Non-refur ake checks payable to the ** For Credit Card payments,	Department of Natural R		and payment ins	structions.
	☐ Deta	iled Project Description per ☐ Sketches, photos, s ☐ Plans of water syste	pecifications and plans			
	☐ Legil	Location(s) where v	ource(s) and take point(s water is to be used is/are on(s) where water is to be) are clearly marked and l clearly marked and labele e discharged or returned to	ed	urce is/are
	☐ Well	of ADF&G Fish Habitat Pe Log(s), if applicable and av ymetry or other source volu	ailable.			
		sets out the required informed to process an application			rtment to cons	ider any other
state lar AS 40.2 requeste who is descript reached applicar Uniform	nd and re 25.110 an ed, AS 43 the subje- tion of the d. False s at agrees a Electron the origina	authorizes the director to desources. This information is ad 40.25.120 (unless the info.3.05.230, or AS 45.48). Publicated of the information may be challenged information, the tatements made in an application with the Department to us in Transactions Act, AS 09.8 at paper form of this records	made a part of the state purmation qualifies for conficing information is open to installenge its accuracy or changes needed to correction for a benefit are pune "electronic" means to compare to the control of the conficing in	ublic land records and becomentiality under AS 38.05.0 inspection by you or any maccompleteness under AS 4 ct it, and a name and address under AS 11.56.21 conduct "transactions" (as not relate to this form and the	omes public info 35(a)(8) and c ember of the po 4.99.310, by g ess where the 0. In submitting those terms a that the Depart	ormation under onfidentiality is ublic. A person giving a written person can be g this form, the re used in the ment need not
Tempor applicat AAC 93	ary Wate ion is tru 3.210-220	ow, I hereby certify that I have er Use Authorization on bel- e and correct to the best of , that the water used remain if necessary to protect the v	nalf of the applicant listed my knowledge. I underst is subject to appropriation	 d. I also certify that the interaction and that no water right or by others, and that temporaries 	nformation pre priority is esta	sented in this ablished per 11
Signatu	re of App	olicant or Authorized Repres	sentative	Date:		
Printed	Name					
Title						
Organiz	zation					

REFERENCES

Measurement Units:

CFS = cubic feet per second

GPM = gallons per minute

GPD = gallons per day

AF = acre-feet of water

AFD = acre-feet per day

AFY = acre-feet per year

MGD = million gallons per day

Conversions:

1 CFS = 646,317 GPD 1 GPM = 1,440 GPD 1 AF = 325,851 Gallons

11 AAC 93.035. Requirement to apply for the use of a significant amount of water:

- (a) A significant amount of water is that amount of water for which an application for a water right or an application for a temporary water use authorization is required, as described in (b) of this section.
- (b) A person shall file an application for a water right under 11 AAC 93.040 or for a temporary water use authorization under 11 AAC 93.220 before
- (1) the consumptive use of more than 5,000 gallons of water from a single source in a single day;
- (2) the regular daily or recurring consumptive use of more than 500 gpd from a single source for more than 10 days per calendar year;
- (3) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or
- (4) any water use that may adversely affect the water rights of other appropriators or the public interest.

GLOSSARY OF TERMS

ADF&G:

Alaska Department of Fish and Game.

ADEC:

Alaska Department of Environmental Conservation

Anadromous Fish:

Fish that migrate from salt water to spawn in fresh water. A fish or fish species that spends portions of its life cycle in both fresh and salt waters, entering fresh water from the sea to spawn and includes the anadromous forms of pacific trout and salmon of the genus Oncorhynchus (rainbow and cutthroat trout and chinook, coho, sockeye, chum and pink salmon), Arctic char, Dolly Varden, sheefish, smelts, lamprey, whitefish, and sturgeon.

Cofferdam

A water tight enclosure pumped dry to permit construction work below the waterline.

Dam:

An artificial barrier constructed to impound or hold back water to raise its level, or to divert the flow of water.

AS 46.17.900(3) "Dam" includes an artificial barrier, and its appurtenant works, which may impound or divert water.

Discharge Area:

The location where water is discharged.

Diversion:

A channel or other structure used to change or direct the flow of water, over and in direct contact with the ground, from one watercourse to another. Any activity, constructed or not, that alters the natural flow of water such as: fill, levee, ditches, channels, culverts, cofferdams, temporary or permanent dams and reservoirs, etc.)

Gravity/Ditch:

The use of a natural or constructed ditch or channel to divert the natural flow of water from one location to another.

Haul Trucks:

Trucks specifically designed to haul water.

Headgate:

A gate for controlling the water flowing into a pipe or channel.

Impoundment:

Any temporary or permanent artificial barrier that holds back or confines the natural flow of water such as: a dam, reservoir, cofferdam, etc.).

In Source Water Use:

A device that is placed within a water source that utilizes the water for a specific purpose without removing the water from the source.

Examples:

- Hydrokinetic Device or Hydroelectric Turbine: source water flow is use to turn the device or turbine fins which turn a
 generator creating power.
- Suction dredging from a barge or other floating structure where:
 - both water and sediment are sucked up creating a water/sediment slurry which is pumped to another location within the water source for discharge; or
 - the water is separated from the water/sediment slurry with the separated water being discharged back into the water source and the sediment being discharged elsewhere.

Levee:

A natural or manmade embankment or barrier, along the edge of a stream, lake or river, built to direct the flow of water or to prevent the overflow of water such as a river.

Method of Taking:

How the water is removed from the source (i.e. pumping, diverting, and/or impounding) and the type of equipment used to remove the water.

Pump:

The use of mechanical pumps (manual, electric, internal combustion, etc.) to move water from one location to another.

Pump Around:

A dewatering method involving withdrawing water via pump, such as from a cofferdam or stream, to isolate the jurisdictional water from the work area to work in dry conditions. The water, which is initially pumped, is sometimes then discharged into a ditch or channel to complete the process of moving the water around the work area.

Recovery Rate: (Wells)

The rate at which water flows into the well while water is being pumped out of the well.

Reservoir:

A structure constructed to store water or cause water to be stored for use. A natural or manmade pond, lake, or basin, used for the storage, regulation, and control of water. Water held in storage in either an artificial or natural basin and impoundments primarily for a source of water for power, municipal, industrial, domestic or flood control use.

AS 46.17.900(9) "reservoir" means a basin, appurtenant to a dam, that is capable of impounding water.

Resident Fish:

Fish that do not migrate out to the ocean, but remain in freshwater

Resistant Fish: (North Slope)

Species of fish that are resistant to low concentrations of dissolved oxygen. For example: ninespine stickleback and Alaska blackfish.

Sensitive Fish: (North Slope)

Species of fish that are sensitive to low concentrations of dissolved oxygen. These include Arctic grayling, Arctic char, lake trout, Dolly Varden, whitefish, and other species.

Siphon:

A tube, hose or pipe used to convey water upwards from one location then down to a lower location. Once water has been forced into the tube, hose or pipe, typically by suction or immersion, flow continues unaided.

Stream Bypass:

A diversion that returns the water to the same source stream but downstream from the original take point.

Storage Tanks:

Containers used to store water for short or long-term use.

Sub-surface Source:

Water that lies beneath the ground surface and is accessed through the use of a dug or drilled well, or an excavation such as a trench or pit.

Surface Source:

Water that is present on the ground surface such as: river, creek, stream, lake, pond, spring, wetland, etc.)

Take Point:

The location where water is withdrawn or diverted from its source.

Withdrawal:

A withdrawal occurs when water is taken from a ground or surface water source, either permanently or temporarily, and conveyed to an area or location for use or to a discharge area. A withdrawal is distinguished from a diversion in that a withdrawal occurs by taking water from the source via a hose or pipe wherein the withdrawn water is not in direct contact with the ground over which it is conveyed.

Alaska Department of Natural Resources Division of Mining, Land and Water – Water Resources Section

Attachment A – Project Description

PURPOSE AND NEED

The existing Manokotak road infrastructure is deteriorating due to a lack of proper storm drainage and inferior roadside ditching unable to convey surface water to existing culverts. The proposed rehabilitation project will establish proper road embankments, create roadside ditching improve the storm drainage system, install new culverts at engineered locations, and install new drainage channels interconnecting First, Second, and Third Streets (See Figure 2). Additionally, the streets are very narrow, constricted by the existing 20-foot right-of-way, and parked cars along the shoulders create heavy congestion, especially along Third Street. The establishment of parking areas, proper road embankments, improved storm drainage systems, and appropriate street/stop signage will create safer traveling conditions for residents and enhance the overall road infrastructure in Manokotak.

PROPOSED PROJECT

The Manokotak Road Rehabilitation Project will involve the rehabilitation of six (6) roads (0.9 total miles), the installation of new drainage features, and the construction of four on-street parking stalls and ramps along Third Street constructed with retaining walls and guardrails. Road improvements will include the placement of a woven geotextile material to stabilize all subgrades, placement of new fill material to establish proper road embankments, followed by the placement of a crushed aggregate surface course to widen and enhance the traveling surface.

The proposed drainage features include the placement of new appropriately sized culverts along existing roadways, replacement of existing failed culverts, the construction of roadside ditches along all streets, and the installation of rock-filled drainage channels with perforated pipe. The drainage channels will run between lots, perpendicular to First, Second, and Third Street. The new storm drainage features will improve drainage patterns and ensure water conveyance away from residential housing. Additionally, the proposed improvements will prevent ponding in existing roadways, which leads to erosion/rutting, washouts, and health concerns.

The roadway alignments, typical sections, and locations of drainage channels, culverts, and parking stalls are shown on the attached figures.

The proposed project will include the following route-specific improvements (See Figures):

- <u>First Street (Route 1006-10)</u> First Street, from Salmon Street to Alder Street, will have a 15-foot wide traveling surface. An approximately 18-inch deep ditch will be constructed on the east side of the road.
 - o Length Approximately 820-ft.

- <u>Second Street (Route 1007-10)</u> Second Street, from Salmon Street to C Street, will have a 15-foot wide traveling surface. An 18-inch deep ditch will be constructed on the east side of the road.
 - o <u>Length</u> Approximately 1,390-ft.
- <u>Third Street (Route 1008-10)</u> Third Street, from Salmon Street to C Street, will have a 12-foot wide traveling surface. An 18-inch deep ditch will be constructed on the east side of the road, and four on-street parking areas will be constructed along the west side. The on-street parking areas will also include ramps to access residential properties (See Figure 5).
 - o <u>Length</u> Approximately 1,410-ft.
- <u>Salmon Street (Route 1014-10)</u> Salmon Street, from First Street to Third Street, will have a 15-foot wide traveling surface. A 6-inch deep ditch will be constructed on the north side of the road.
 - o <u>Length</u> Approximately 470-ft.
- Alder Street (Route 1010-10) Alder Street, from First Street to Third Street, will have a 15-foot wide traveling surface. An 18-inch deep ditch will be constructed on the south side of the road.
 - o Length Approximately 470-ft.
- <u>C Street (Route 1012-10)</u> C Street, from Second Street to Third Street, will have a 15-foot wide traveling surface. An 18-inch deep ditch will be constructed on the south side of the road.
 - o <u>Length</u> Approximately 230-ft.

Approximate Water Withdrawal Point, Igushik River, Manokotak, AK, 58°58'51.24"N Latitude, 159° 3'35.28"W Longitude

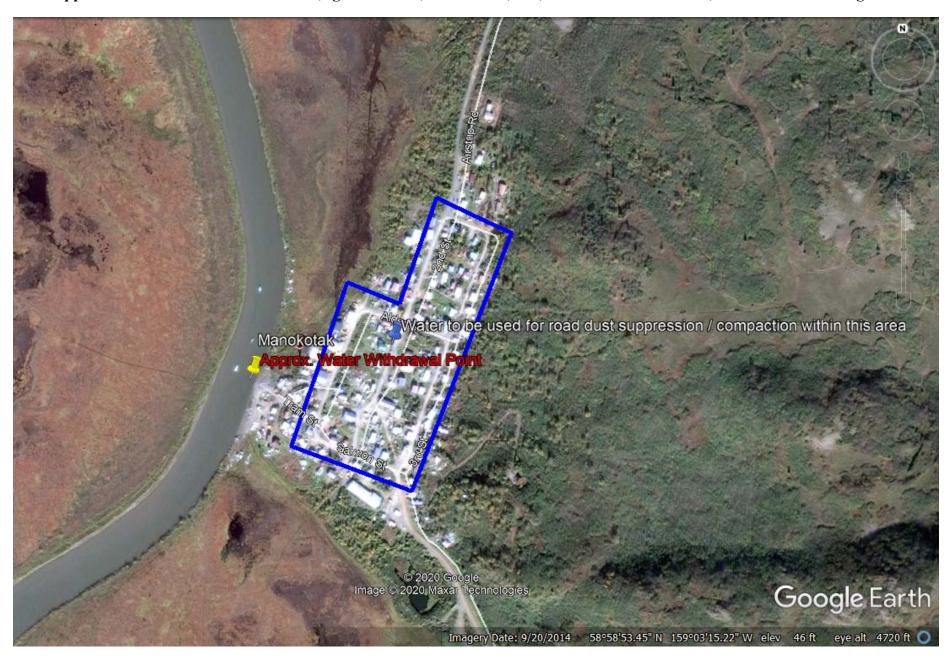
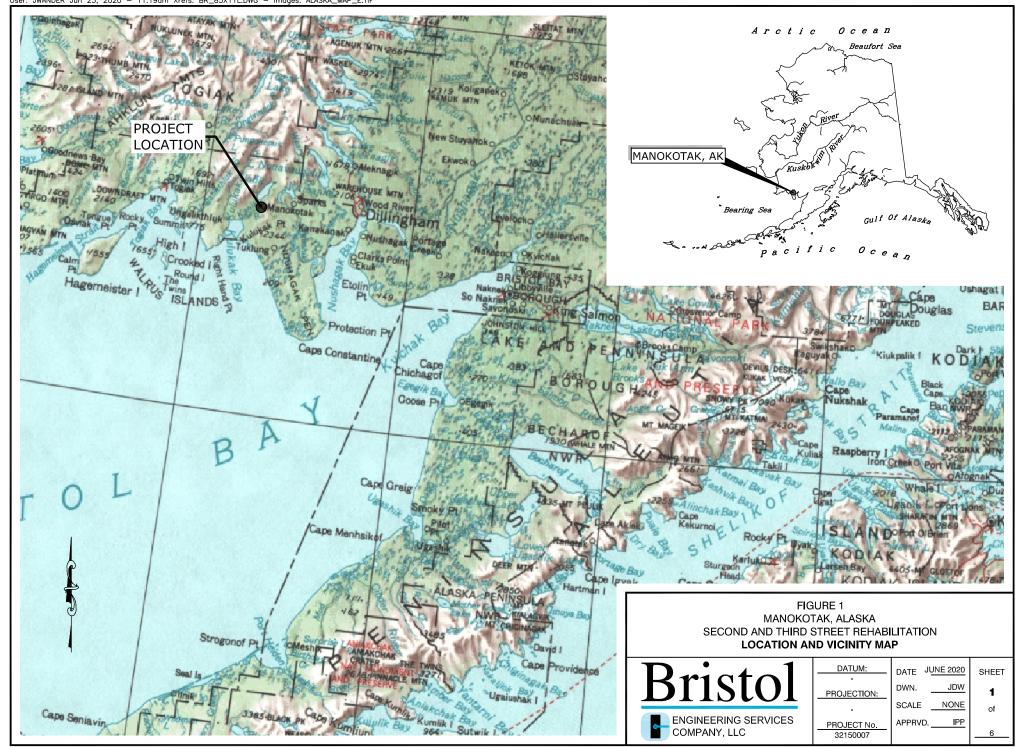
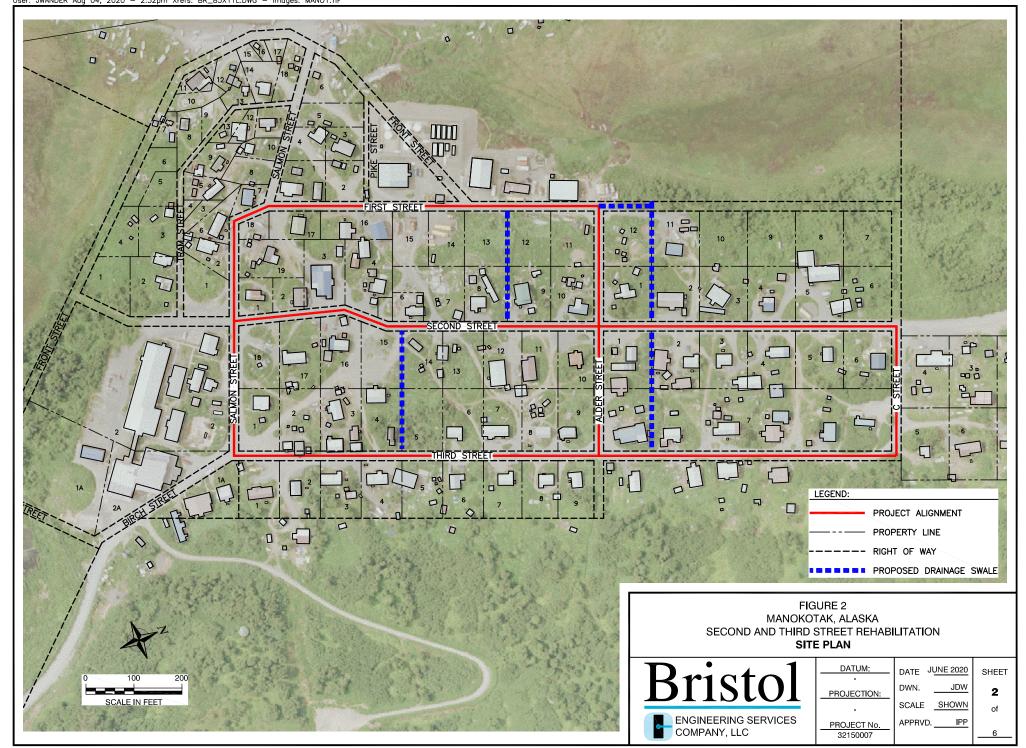


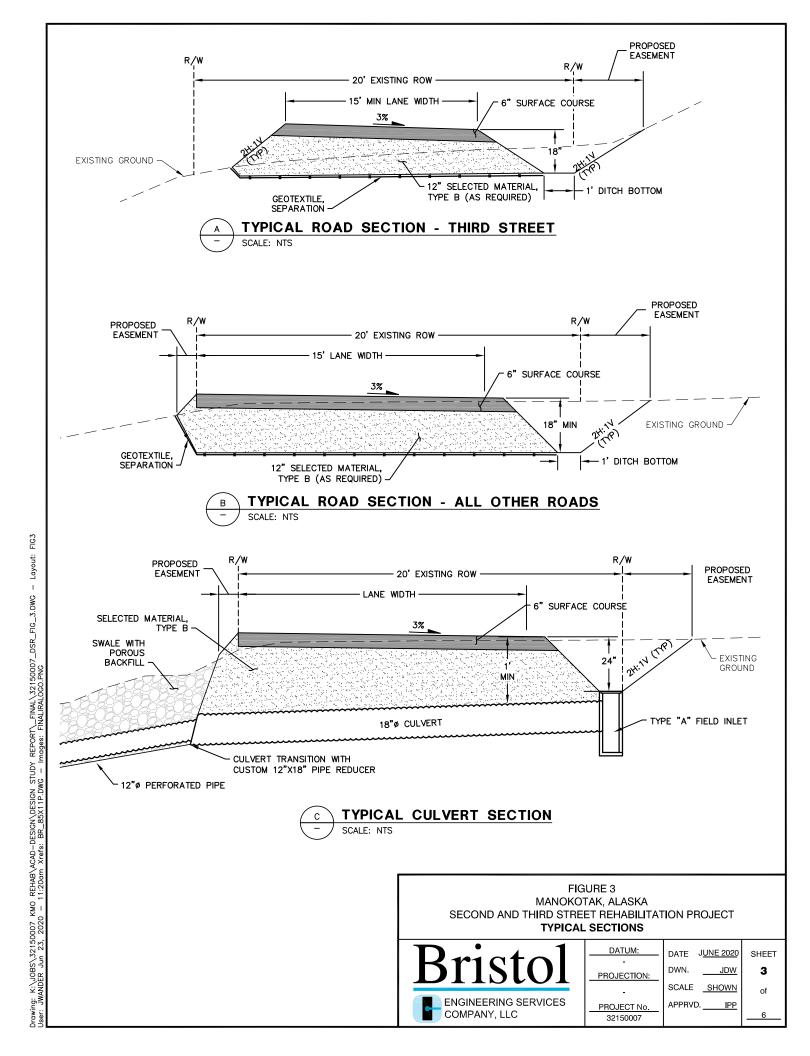
Image / Location source: Google Earth Pro, 2020

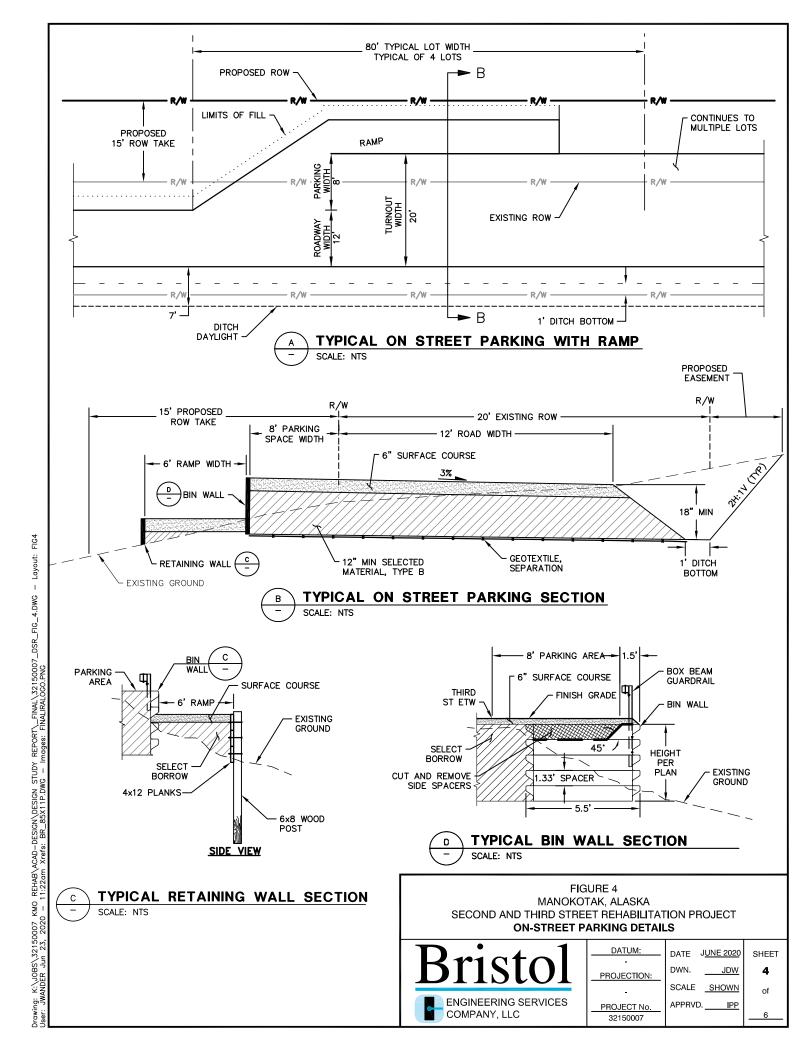
Alaska Department of Natural Resources Division of Mining, Land and Water – Water Resources Section

 $Attachment \ B-Figures$



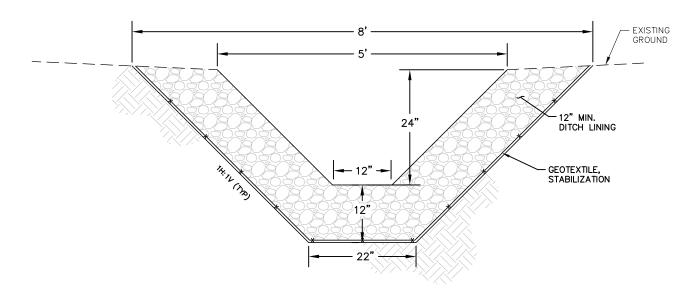






A TYPICAL SWALE TRENCH SECTION WITH PIPE

- SCALE: NTS



B TYPICAL OPEN CHANNEL SWALE SECTION

SCALE: NTS

FIGURE 5 MANOKOTAK, ALASKA SECOND AND THIRD STREET REHABILITATION PROJECT TYPICAL SWALE SECTIONS



DATUM:	
-	_
PROJECTION:	٩
-	,
PROJECT No. 32150007	

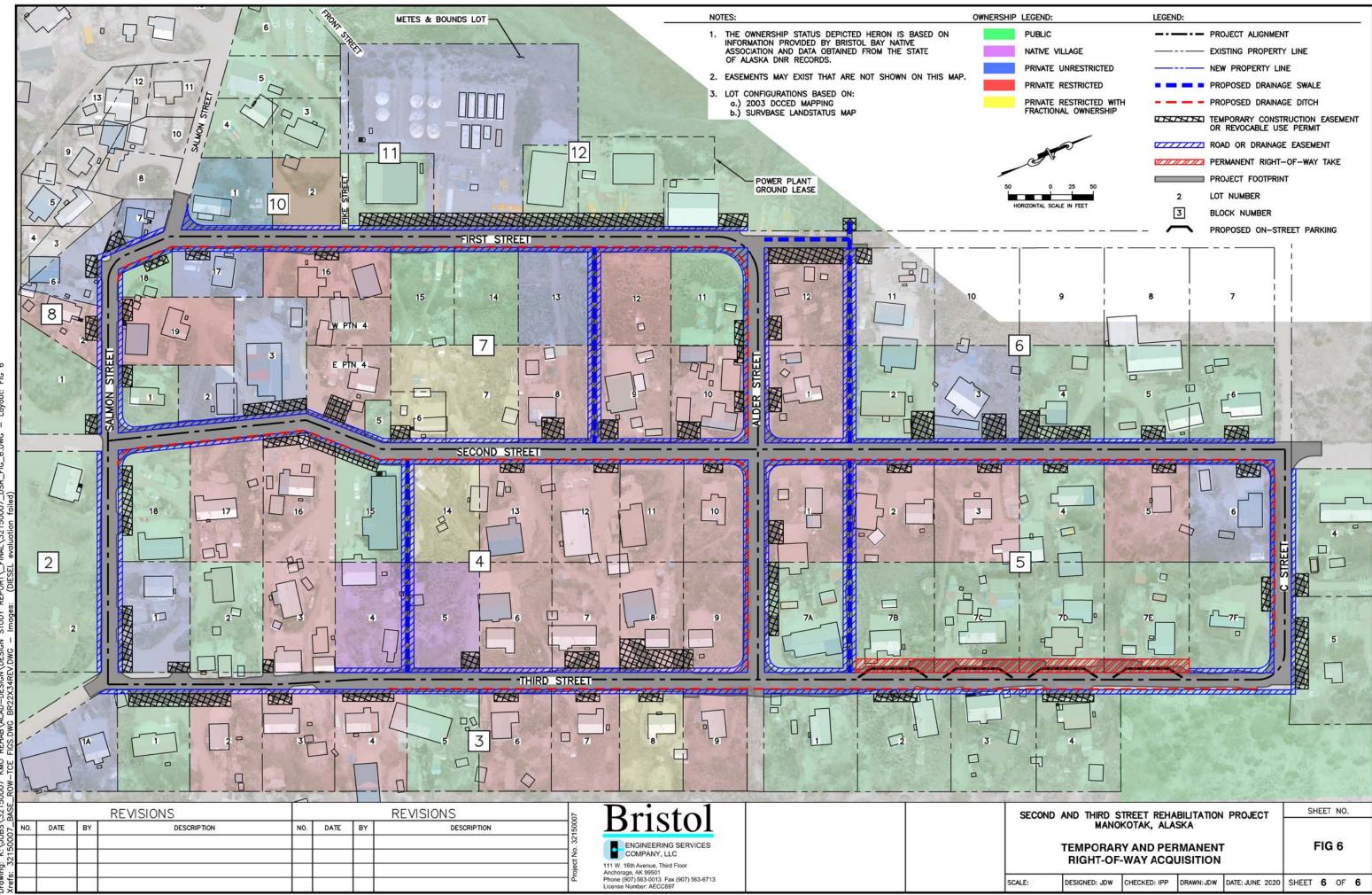
DATE J<u>UNE 2020</u> SHEET

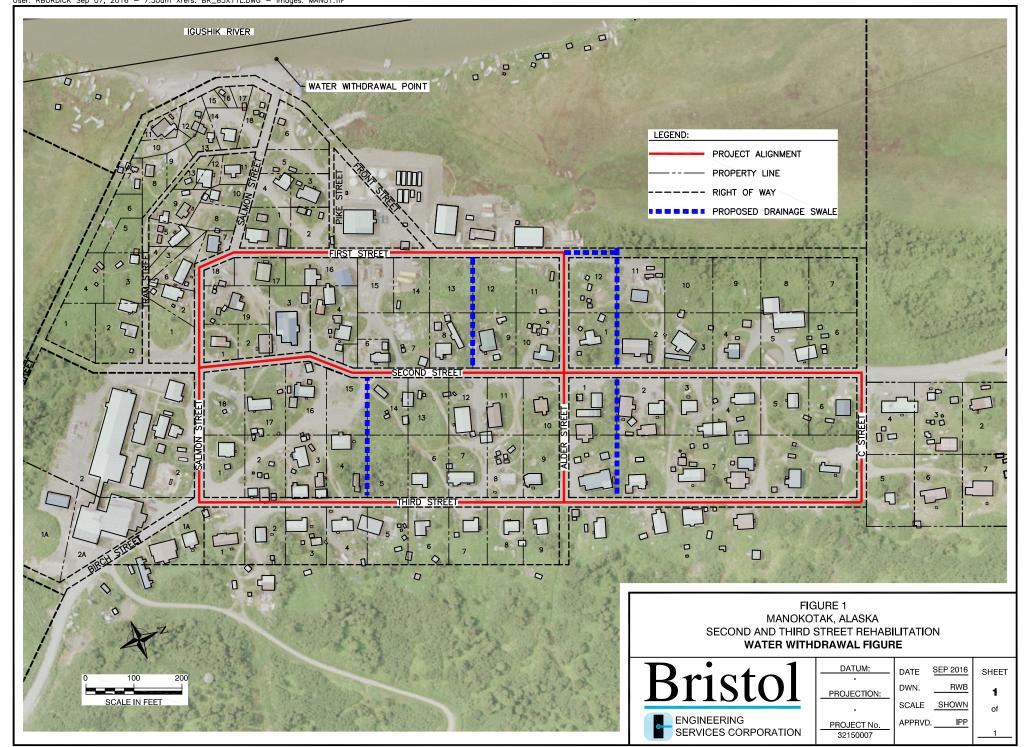
DWN. <u>JDW</u>

SCALE <u>SHOWN</u> of

APPRVD. <u>IPP</u>

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Alaska Department of Natural Resources Division of Mining, Land and Water – Water Resources Section

Attachment C – Fish Habitat Permit



FISH HABITAT PERMIT APPLICATION

Alaska Department of Fish and Game - Habitat Section

Office Locations

Name:		·		
Mailing	Address:			
Email A	ddress:			
Phone: _			_ Alt Phone:	
AGENT	/ POINT OF CONTA	CT:		
Name:				
Mailing	Address:			
Email A	ddress:			
Phone: _			_ Alt Phone:	
PROJE(CT DESCRIPTION:			
PROJE	CT DESCRIPTION:			
	CT TIME FRAME:			to
PROJE				to
PROJE(CT TIME FRAME: _ CT LOCATION:			to
PROJEO PROJEO Water bo	CT TIME FRAME: _ CT LOCATION:			
PROJEO PROJEO Water bo	CT TIME FRAME: CT LOCATION: ody name: nous stream number:			

Water body width:	Water body depth:
Substrate type (Boulder, cobble, g	gravel, sand, mud):
Stream gradient:	
ASE COMPLETE THE APPLICATION of best practices for many commonly	BLE SECTIONS BELOW: y authorized activities can be found at our Habitat Permits Website
IN-WATER WORK:	
Will you place a structure or any fil	ll below <u>ordinary high water</u> ? Yes No
Will you remove material from belo	ow ordinary high water?
Type and amount:	
Will you alter the bed or banks of the	he water body?
How?	
Will you use tracked or wheeled eq	uipment below ordinary high water?
What type?	
Will you drive piles below ordinary	high water? Yes No
How many and what type? _	
Pile installation method:	vibratory hammer impact hammer drilled
	other:
Will you divert the stream around the	he work area?
How long will the stream be diverted	ed?
How will you divert the stream?	
	r silt fencing to isolate the work area?
Will you dewater the work area with	h a pump?
Who will trap fish and remove them	n from the work area?

WATERBODY CHARACTERISTICS:

E.

G.	STREAM CROSSINGS:					
	What type of vehicles or equipment will cross the st	ream or lake?				
	How many crossings (one-way) will be required?					
	Will you build ice bridges for winter crossing?					
Н.	WATER WITHDRAWAL:					
	Pump intake size (inches): Maxi	mum pumping rate (gpm):				
	Total daily amount (gal): Total	seasonal amount (gal):				
	Water withdrawal from fish-bearing waterbodies will require appropriate intake screening to avoi					
	impacts to fish. Screening criteria can vary by loc	ation depending on the species of fish and life stages				
	present at the time of withdrawal. Contact the Habit	at Section for more information on intake screens.				
	Intake screening specifications (attach photos if avail	able):				
info	se attach plans, specifications, aerial photormation in support of your application. cal mail, email, or in person at the appropri	Submit your completed application by				
	ify all information provided in my application and supnowledge.	porting documents is true and complete to the best of				
	Applicant Signature	Date				

Alaska Department of Fish and Game Fish Habitat Permit Application – General Waterway/Waterbody

Attachment A – Additional Information

Step B: Type and Purpose of Project

PROPOSED PROJECT

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PURPOSE AND NEED

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Step F: Site Rehabilitation / Restoration Plan

The following precautions and construction activities will be taken to ensure that fish and other aquatic organisms are protected from adverse impacts:

- A Temporary Water Use Permit will be acquired from the Alaska Department of Natural Resources (ADNR)-Division of Mining, Land and Water (MLW) for fresh water withdrawal from the Igushik River for compaction and dust suppression.
- The pump hose used to withdraw water from the Igushik River will be fitted with an appropriately sized fish screen.
- The installation of culverts, road-side ditches, and drainage channels will help mitigate flooding, erosion, and other storm water issues along the project corridor.
- Best Management Practices (BMPs) from the yet-to-be-determined project contractor will be used to maintain State Water Quality Standards in the event of a spill or other incident.

The project will not disturb more than one acre of undisturbed land. No channel or bank alterations of the Igushik River will occur as part of this project. There is no wastewater discharge associated with the proposed project. The project does not contain any waters of the US and will therefore not impact any wetlands habitat. The proposed action will not result in excessive levels of organic materials, inorganic nutrients, or heat, and is not anticipated to cause an adverse impact on essential fish habitat.